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THE AMERICAN FISHERIES SOCIETY

AMERICAN FISHERIES SOCIETY

The American Fisheries Society was organized in 1870 and was incorporated in 1911 in Washington, District of Columbia. Its objectives are conservation, development, and wise utilization of recreational and commercial fisheries, promotion of all branches of fisheries science and practice, and exchange and dissemination of knowledge about fish, fisheries, and related subjects.

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Selected Coolwater Fishes of North America. Edited by Robert L. Kendall. American Fisheries Society Special Publication 11, 1978. 437 pages. $15.00 (American Fisheries Society Members: $13.00).
Proceedings of an exceptional 1978 symposium on the ecology, culture, management, and harvest of coolwater fishes. Walleye, sauger, yellow perch, northern pike, and muskellunge are emphasized. From the developing commercial fisheries of boreal Canada to the new sport fisheries of Texas, these species comprise a continental resource of growing significance. The latest word on an exciting field is contained in this book.

Optimum Sustainable Yield as a Concept in Fisheries Management. Edited by Philip M. Roedel. American Fisheries Society Special Publication 9, 1975. 89 pages. $4.00. *An examination of optimum and maximum yield concepts, their implications for commercial and recreational fisheries, and their national and international applications.*

Reservoir Fisheries and Limnology. Edited by Gordon E. Hall. American Fisheries Society Special Publication 8, 1971. 511 pages. $4.95. *A broad survey of fisheries biology and management in relation to limnological variables and water-level manipulation.*

A Century of Fisheries in North America. Edited by Norman G. Benson. American Fisheries Society Special Publication 7, 1970. 330 pages. $3.45. *A 100-year history of fisheries research, culture, development, and management on this continent.*

A List of Common and Scientific Names of Fishes from the United States and Canada. Third Edition. American Fisheries Society Special Publication 6, 1970. 150 pages. $4.00 (American Fisheries Society Members: $2.00). *The definitive reference for this subject.*

A Symposium on Diseases of Fish and Shellfish. Edited by Stanislas F. Snieszko. American Fisheries Society Special Publication 5, 1970. 528 pages. $5.95. *Protozoan and metazoan parasites; bacterial and viral diseases. Marine fish, molluscs, and crustaceans are emphasized.*

A Symposium on Estuarine Fisheries. Edited by Roland F. Smith. American Fisheries Society Special Publication 3, 1966. 154 pages. $2.00. *A useful source book for coastal zone management.*

Management of Wilderness Area Waters. Edited by John S. Gottschalk. American Fisheries Society and International Association of Fish and Wildlife Agencies, 1976. 22 pages. $2.00. *A debate among biologists, administrators, and conservationists on wilderness fisheries values.*

Guidelines for Striped Bass Culture. Coordinated by Edward W. Bonn. American Fisheries Society Southern Division, 1976. 103 pages. $5.00. *A summary of cultural techniques that have helped create inland fisheries for striped bass.*

Reservoir Fishery Resources Symposium. American Fisheries Society Southern Division, 1967. 569 pages. $10.00. *A stimulating and oft-cited collection of papers on reservoir ecology.*

Symposium on Overharvest and Management of Largemouth Bass in Small Impoundments. Edited by John L. Funk. American Fisheries Society North Central Division Special Publication 3, 1974. 116 pages. $3.00. *Harvest rates, catch quotas, and size limits in the management of Midwestern bass.*

Glossary of Fish Health Terms. Edited by George Post. American Fisheries Society Fish Health Section, 1977. 48 pages. $5.00. *An invaluable technical dictionary.*

Prices include postage and handling for North American orders. For orders from beyond North America, add $5.00 to the price of American Fisheries Society Special Publication 11 (for airmail shipment) and $1.00 to the price of each other book. Send payment (United States currency or equivalent) or institutional purchase order to:

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New Publications From Discipline-Interest Sections of the American Fisheries Society

Procedures for the Detection and Identification of Certain Fish Pathogens. Edited by David W. McDaniel. American Fisheries Society Fish Health Section, 1979. 112 pages. $10.00 (American Fisheries Society Members: $8.00).

The first Fish Health Section "Blue Book," published in 1975, did much to establish standard methods for detecting and identifying infectious fish diseases. It has become widely recognized and accepted in North America, Europe, and Japan. The "Blue Book" has been substantially updated to reflect current advances in fish pathology, and now is available in this revised form.

A Review of the EPA Red Book: Quality Criteria for Water. Edited by Robert V. Thurston, Rosemarie C. Russo, Carlos M. Fetterolf, Jr., Thomas A. Edsall, and Yates M. Barber, Jr. American Fisheries Society Water Quality Section, 1979. 313 pages. $14.00 (American Fisheries Society Members: $12.00).

The Environmental Protection Agency is responsible for setting water quality standards in the United States. The agency published its chemical basis for such standards, Quality Criteria for Water *(the "EPA Red Book"), in 1977. These criteria have major implications for aquatic resource management, but many rest on inadequate data. The Water Quality Section has completed a detailed review of the "Red Book"; over 150 scientists have analyzed the strengths and weaknesses of EPA criteria for 53 categories of aquatic pollutants. This critique will have an important impact on the evolution of water quality standards.*

Analyzing the Hazard Evaluation Process. Edited by Kenneth L. Dickson, Alan W. Maki, and John Cairns, Jr. American Fisheries Society Water Quality Section 1979. 156 pages. $12.00 (American Fisheries Society Members: $10.00).

Nearly a quarter-million new compounds are synthesized each year by the chemical industry. Hundreds of these will be developed for commercial application and potentially threaten aquatic habitats. Against this staggering production rate, procedures must be developed to assess the environmental risk posed by these chemicals in a timely, accurate, and cost-effective way. At a recent international workshop, important strides were made toward standardized approaches, pholosophies, and criteria for aquatic hazard assessment. The workshop proceedings, offered here, demonstrate broad areas of concensus, and highlight remaining areas of disagreement, within this scientifically difficult field of environmental protection.

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Symbols and Abbreviations

The following symbols and abbreviations are used in the *Transactions* without definition. Any others must be defined in the text at first mention, in the captions or footnotes of tables, or in figures or figure captions. Use spelled-out words to start sentences.

Measurement Prefixes

giga (10^9)	G
mega (10^6)	M
kilo (10^3)	k
deci (10^{-1})	d
centi (10^{-2})	c
milli (10^{-3}	m
micro (10^{-6})	μ
nano (10^{-9})	n
pico (10^{-12})	p

Weights and Measures

calorie	cal
degrees Celsius	C
gram	g
liter (only with prefix)	l
meter	m
tonne (10^3 kg)	t

Spell out liter (except when used with a prefix), hectare, and all units of time (year, hour, minute, second). Although weights usually are measured and reported in mass units, it is understood that such values represent the weights of equivalent standard masses at the measurement locality.

Mathematics and Statistics

all standard mathematical signs, symbols, and abbreviations	
base of natural logarithms	*e*
coefficient of linear correlation	*r*
degree (angular)	°
degrees of freedom	df
exponential	exp
infinity	∞
logarithm	log
minute (angular)	′
not significant	NS
percent	%
probability	*P*
sample size	*N*
second (angular)	″
standard deviation	SD
standard error	SE

Specify the base for each logarithm: $\log_{10}X$; $\log_e Y$. Commonplace statistical tests (Student's *t*, *F*, chi-square, et cetera) require no formal definition or reference.

Chemistry

all atomic symbols of the Periodic Table	
dextro	D
hydrogen ion activity (negative log of)	pH
levo	L
molar	M
normal	N
ortho	*o*
para	*p*
per mille (per thousand)	‰

For parts per million, use mg/liter, mg/kg, et cetera.

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August	Aug
September	Sep
October	Oct
November	Nov
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sex (tables, figures, hybrid crosses)	
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female	♀
Union of Soviet Socialist Republics (references)	USSR
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